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VOICE OF THE ELECTRIC UTILITY INDUSTRY

Clean air, acid rain

Senate, administration deal; toxic clause and scrubbers

WASHINGTON—The Bush administration and Senate forged a compromise on the Clean Air bill, S.1630, that the full Senate took up in heated debate on March 5. The House version was still in committee.

Details on the compromise and what its projected effects would be if passed were still sketchy as of mid-March. The "details remain to be defined," said an EPA staffer.

A summary of the compromise raised concern that utilities may have to install scrubbers or electrostatic precipitators to all coal-fired power in order to comply with the mercury removal portion of the toxics provision.

According to a summary of the bill "only particulate and mercury emissions are to be regulated with a maximum achievable control technology standard" for electric utility boilers. In addition, "The EPA is not authorized to require flue gas scrubbers to control emissions of hazardous air pollutants from utility boilers."

But EPA's David Ryan pointed out that state and local governments could require that utilities use scrubbers to meet or

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10-yr, $500-M NAPAP results: Are emissions cuts too tough?

WASHINGTON—The draft report of the largest acid rain study in history concludes that sulfur-and nitrogen-based air pollutants cause most of the acidification plaguing sensitive lakes and streams in the Northeast.

But the $500-million, 10-year study also says there is no pending large-scale ecosystem collapse as a result of acid rain and that there's no apparent trend in the acidity of rainfall.

An integrated assessment, expected by the end of the year, is to compare about 25 pollution scenarios to help policymakers choose the levels and areas of pollution control. But Congress seems likely to forge a clean air package before then, using the administration proposal as a base (see story at left).

Results are not quick reading

The 28-volume, 15,000-page draft report of the National Acid Precipitation Assessment Program was unveiled mid-February at an international NAPAP meeting. The report, with 300 authors, and over 100 peer reviewers, revealed, in part:

•U.S. acid rain is not responsible for regional crop yield re-

Continued on page 16

LATE NEWS

Holding companies Iowa Resources and Midwest Energy revealed merger plans on March 16.
Northeast Utilities Co.'s Chapter 11 reorganization plan for PSNH was "solidly approved" by most PSNH shareholder groups. Bankruptcy court confirmation may disallow objecting claims this spring; hearings begin this month. FERC OK'd NU's interim management plan, but transmission access concerns require resolution prior to the takeover. Aug. 1 is the target for approvals.
EPA will not request rehearing of the prevention of significant deterioration issue from the WEPCo decision (March, p.1). WEPCo/EPA discussions continue.
Seabrook—after 17 years, p. 3.

Watkins: N-waste site by 2010 depends on courts

Mark T. Hoske
News Editor

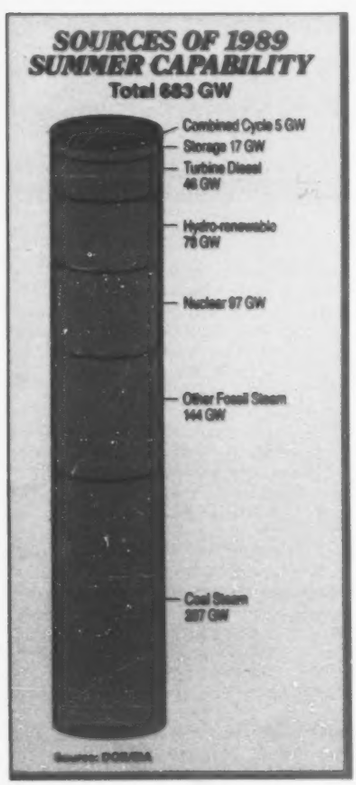
WASHINGTON—DOE Secretary James Watkins said meeting the extended 2010 deadline for completion of a high-level nuclear waste repository depends on the length of the current court cases with Nevada.

Watkins said the Department of Energy will study the cost of further delays, with a cost-benefit analysis of centralized nuclear waste storage versus expanding nuclear waste repositories on plant sites nationwide. Further, the department will seek to unlink the high-level site with the Monitored Retrievable Storage (MRS) facility as an intermediate solution to accept waste starting in 1998.

As previously reported, the DOE had filed suit against Nevada in U.S. District Court in Las Vegas for delay of permits to allow site characterization at Yucca Mountain, as Congress has required. Nevada has sued to halt characterization.

Nevada recently signed a petition to

Continued on page 19



Public will debate $717-M NOPSI sale

NEW ORLEANS—Public hearings will be held this month on a proposed $717-million city buyout of Entergy Corp.'s New Orleans Public Service Co.

Negotiators said the Feb. 22 agreement in principle (*EL&P*, March, p.1) has resolved all issues that caused the July 1989 agreement to fall through.

The city council could decide in May, after the public hearings, if it wants to put the agreement into contractual language. It would include capacity contracts and purchase of NOPSI generating assets by 1996.

The buyout would include a small portion of Louisiana Power & Light Co. territory that serves New Orleans. LP&L is also an Entergy subsidiary. Officials expressed hope of completing a deal by year's end.

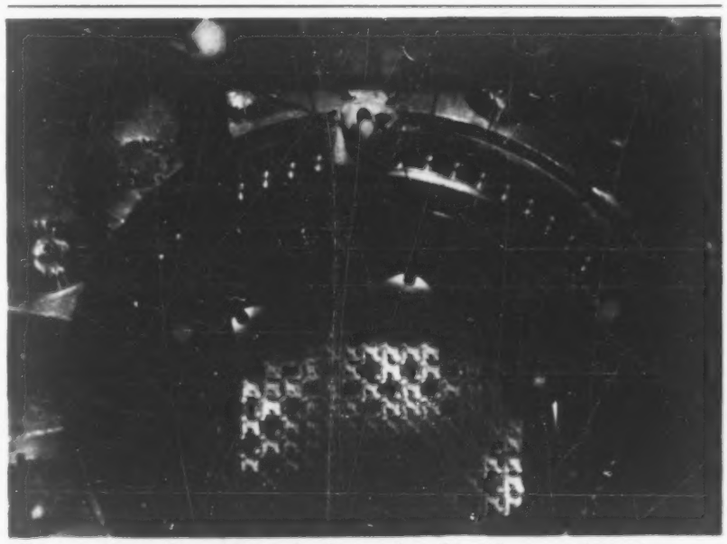
John J. Cordaro, group vice president for NOPSI and LP&L, said Entergy would "prefer to continue serving the City." He added, however, that the buyout threat has been "a sword over our head for six or seven years and we'd like it resolved."

Transmission access crumbled deal

Last year's deal crumbled when the verbal agreements were applied to paper. Transmission access topped a list of contentions.

Taxable bonds would finance the deal due to a 1988 law restricting use of tax-exempt financing for acquisitions of investor-owned utilities.

State regulators want an emissions auction to boost market liquidity. They also recommend a flexible emissions baseline, p. 3.



Comanche Peak loads fuel...at last

The fuel-load team at Texas Utilities Inc.'s Comanche Peak nuclear Unit 1 lowers the last of 193 fuel assemblies into the reactor vessel. Each $400,000 fuel assembly contains the energy equivalent of 108,000 tons of lignite coal costing $1.3 million; 1.379 billion ft^3 of gas at $3.4 million; or 250,000 bbl oil at $4.6 million. The tops of the 13-ft, 1500-lb fuel units are visible through the blue-lit water. The darker assemblies contain control rods. On either side of the vessel opening are the reactor-head guide-pins. Plugs covering the threaded holes for the reactor head bolts border the opening. The larger access covers protect instruments. The Westinghouse-supplied fuel was loaded Feb. 9-14 in the 1150-MW reactor. Construction began in October 1974; low-power testing started in early March. The cost of the two units is $9.1 billion. (*EL&P*, March, p.3)

News Briefs

JILL MINNER, Special Projects Editor

Idaho Power trys to rid all substations of PCBs

Idaho Power Co. will launch a five-year campaign to rid its 200-some substations of polychlorinated biphenyls (PCBs), according to the utility. Even though the PCB levels in Idaho Power's substations are well within federal safety standards, the utility is voluntarily seeking to make the sites PCB-free. According to Idaho Power, removing the PCBs will eliminate the long-term costs associated with monitoring and testing substation equipment and grounds for PCB contamination. Nine employees will be added to the utility's transformer shop, where they'll work with division substation personnel to clean or replace PCB-contaminated equipment and remove any tainted soil.

NU to lease Stanley Works hydro station and buy HEC Energy

Northeast Utilities said it has agreed to lease the 10-MW Rainbow Dam hydroelectric generating station from the Farmington River Power Co. (FRPC), a subsidiary of The Stanley Works. According to NU, it will lease the station, located in Windsor, CT, for 30 years and will purchase FRPC's transmission and other assets. Under the agreement, the Connecticut Light and Power Co., NU's Connecticut operating company, will maintain Rainbow Dam as a functioning generating plant. Beginning in 2020, the Rainbow lease may be extended for six, 10-year periods at $250,000 per year, according to NU. The utility expects the $7.5-million transaction, which must be approved by the Securities and Exchange Commission and the Federal Energy Regulatory Commission, to be completed by September 1990.

NU has also announced plans to acquire HEC Energy Corp., a supplier of engineering, design, and installation services associated with energy conservation measures. According to the utility, HEC's assets will be acquired by a newly formed, unregulated subsidiary of NU.

DOE plans initiatives for energy efficiency and renewable energy

The Department of Energy recently announced a series of initiatives to increase energy efficiency and the use of renewable energy sources. DOE said it plans to spend $336 million on the initiatives over the next six years if technical progress is made as anticipated.

The initiatives include:

- relighting federal facilities
- relighting commercial buildings
- improving utilities' planning for efficiency
- accelerated building guidelines and standards
- energy analysis and diagnostic centers
- energy from municipal waste
- modern manufacturing technology for photovoltaics
- cost-competitive ethanol fuels
- speeding development of solar detoxification of hazardous wastes
- a new laboratory at SERI
- expanding hydropower.

According to DOE, savings from the energy efficiency initiatives through the year 2000 could exceed $32 billion.

O&R fights tax policy on consumers' rebates

Orange and Rockland Utilities, Inc. said it is currently seeking support from Congress in its fight to reverse a new Internal Revenue Service policy to tax the rebates consumers receive for purchasing energy efficient equipment. "This tax not only unfairly punishes the average person for making an energy-efficient purchase," stated O&R Chairman and CEO James F. Smith, "but also hampers a valuable tool that utilities have used in encouraging the wise use of our nation's energy resources." Smith has urged committee members to ask the IRS to reconsider its position. "I believe this new IRS policy will severely cripple our energy conservation efforts by removing the incentive for our customers to participate [in rebate programs]," he added. According to Smith, the National Association of Regulatory Utility Commissioners has passed a resolution opposing the IRS' decision.

Utilities benefit from recycling programs

Public Service of New Hampshire and Pennsylvania Electric Co. are helping themselves as well as the environment by participating in recycling programs. PSNH expects to recycle more than 65 tons of paper and aluminum cans annually with its new in-house recycling program. "It currently costs us about $10,000 a year to dispose of paper," stated Blair W. Gourley, PSNH supervisor of officer services. "But recycling would eliminate that cost and produce an additional return of an estimated $10,000 to the company for a total savings of about $20,000. Add to that the environmental benefits of reducing incineration and easing the burden on landfills, and it's clear that recycling is the way to go."

Penelec reported that it sold about 12 million lb. of recyclable material, along with other scrap and salvage, for an estimated $2.1 million. Waste materials and timber were sold for $340,000. "About 35 percent of the material was sold as reusable. This recycling conserves energy and natural resources and eases the stress on an overburdened waste-disposal system," explained Harold M. Class, PSNH vice president of materials and services.

Oregon PUC urges utilities to improve conservation efforts

In a report adopted by the Oregon Public Utility Commission, 14 recommendations were made to the state's three major electric utilities to improve their energy conservation efforts. The commission said that if Pacific Power & Light Co., Portland General Electric Co. and Idaho Power Co. made the improvements, energy equivalent to the amount produced by two large thermal generating plants could be saved. According to the PUC, the recommendations include activities and programs aimed at residential, commercial and industrial customers, and the utilities must file semi-annual reports with the commission on how they are meeting these goals. The report, published jointly by the PUC and the Oregon Department of Energy staff, is also intended to provide a framework for the commission to use in reviewing the utilities' least-cost plans.

Many utilities make energy conservation programs a priority

In an effort to encourage customers to save energy, many utilities have either launched or are adding to their existing energy conservation programs.

Minnesota Power received approval from the Minnesota Public Utilities Commission for its 1990 Energy Conservation Improvement Program. In conjunction with other organizations, the utility plans to use over half of its conservation budget to assist low- and moderate-income homeowners and renters in improving the energy efficiency of their dwellings.

Pacific Gas and Electric Co. said it is doubling its efforts to promote customer energy efficiency by creating several major programs. The programs were a result of the California Collaborative, a joint study of ways to improve energy efficiency. Consumer and environmental organizations, government agencies and utilities participated in the study.

Philadelphia Electric Co. is launching a new program designed to help customers conserve energy and save money on electric bills. The utility said its program, which will be phased in over a three-year period, offers residential and business customers incentives and rebates, complimented by audits and consulting services.

Toledo Edison's pilot program, Energy Cost Savers, emphasizes energy-efficient light bulbs and conservation. According to the company, the program can help customers cut their electric bills immediately by lowering consumption, and ultimately could help to keep future rates lower.

Wisconsin Electric's Smart Money Energy Program lets customers receive cash, savings bonds and zero-interest loans for installing efficient electrical equipment and getting rid of inefficient appliances. More than 175-MW of power has already been saved with the program, said WE.

PSNH names chairman

Public Service of New Hampshire President and CEO John C. Duffett has been appointed to the additional position of chairman. Duffett replaces William J. Scharffenberger who resigned after serving as chairman since September 1988. According to the utility, Scharffenberger is a specialist in administering companies in Chapter 11 or facing other critical financial situations. "The final stages of resolving the PSNH bankruptcy are now in view, and the time seems appropriate for me to reduce my involvement with the company," stated Scharffenberger in his letter of resignation. Duffett has been president and CEO since September 1988.

Utilities fined by NRC

The U.S. Nuclear Regulatory Commission recently proposed the following fines:

Arkansas Power & Light Co.
A $75,000 fine for apparent violations of NRC requirements at the Arkansas Nuclear One nuclear plant.

Carolina Power & Light Co.
A $75,000 civil penalty for alleged violation of NRC requirements at the Brunswick nuclear power plant.

Commonwealth Edison Co.
A $100,000 fine for failing to properly evaluate the safety significance of an alteration in ventilation systems at the Zion nuclear plant.

Georgia Power Co.
A $7,500 civil penalty for alleged violation of NRC security requirements at the Vogtle nuclear power plant.

TU Electric
A $30,000 fine for apparent violations of NRC requirements associated with several check valve failures in the auxiliary feedwater systems at the Comanche Peak Steam Electric Station.

Washington Public Power Supply System
A $50,000 fine for an alleged violation of NRC requirements involving environmental qualification of electrical equipment important to safety at the Washington Nuclear Project-2.

In other news, the Nuclear Regulatory Commission Atomic Safety and Licensing Board has approved the settlement of a proceeding between the NRC staff and **Alabama Power Co.** regarding a $75,000 fine for an alleged violation of technical specification requirements governing operation of the Farley nuclear power plant.

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COMMENTARY

The quest for excellence continues

For the past 20 years I have had the privilege of serving on the Review Committee for the Edison Award, the highest honor to be conveyed annually on an investor-owned electric utility by the Edison Electric Institute. The committee selects at least two electric utilities that have made the "most distinguished contribution to the growth and development of the electric light and power industry for the convenience of the public and convenience of all." EEI's group of regional nominators makes recommendations to the committee. Utilities with the most significant achievements are invited to submit formal presentations for the final award, which is presented at EEI's annual convention.

It hasn't been an easy task over the years. Nominators recommendations often have been provincial, politically attractive but less than substantial. Too often it has been hard to pick two whose achievements merited consideration. We exercised our prerogative of nominating our own selections.

But this year, the committee's task was easier. About two dozen recommendations were narrowed to five companies:

- Entergy Corp. for its synergistic system-wide integration of business and social concerns into the Project Olive Branch program. This comprehensive program replaced litigation with negotiation of thorny regulatory issues revolving about the Grand Gulf nuclear plant. It also addressed the social and educational needs of its service territory.
- Pacific Gas & Electric Co. for its outstanding response to the Loma Prieta earthquake in October 1989.
- PacifiCorp for its approach and execution of the Utah Power & Light Co. merger and especially for recognizing transmission access as a potent and profitable resource.
- Pennsylvania Power & Light Co. for its sensitivity to the broad range of needs of disadvantaged customers that lead to the creation of its Customer Assistance and Referral Evaluation Service (CARES) program; for an outreach program that aims to resolve conflict between communities and the utility; and for continued exemplary performance at its Susquehanna Nuclear Plant.
- South Carolina Electric & Gas Co. for extraordinary service and humanitarian effort in the aftermath of Hurricane Hugo, which blacked out three-quarters of its customers under devastating circumstances.

All five are to be congratulated. The final judges will have a difficult task choosing a single winner.

At long last...Seabrook lives

One of the electric power industry's sorriest, most devastating, and frustrating eras has finally ended, with the refusal of the U.S. Court Appeals to further delay the issuance of a full-power license for the Seabrook Nuclear Power Station (see related news stories on pages 1 and 31). Seabrook is ascending to full output for the power-thirsty, capacity-shy New England grid. It has taken 17 years to complete and license Seabrook, at a cost of $6.7 billion, more than seven times the initial projected cost of the project.

Consumers of Seabrook power now face paying for the highly inflated cost of the facility that has resulted from the dilatory efforts of the governor of neighboring Massachusetts, its senior senator, Ted Kennedy, and a host of lessor politicians and "friends" from the Bay State and elsewhere.

From the very beginnning, Seabrook was a David and Goliath project...a small, but well-managed small utility tackling a giant engineering project that was quickly politicized beyond the capability of the utility. The sheer magnitude of the project, with skyrocketing inflation of the mid-1970s, the anti-nuclear backlash of the Three Mile Island 2 accident, and continued opposition by environmental groups and Massachusetts officials finally pushed Public Service Co. of New Hampshire into bankruptcy, further lengthening the licensing process.

But despite these enormous obstacles, Seabrook now is a reality. It should serve as a testimonial to the failure of the regulatory process to forsee and deal with real-world issues affecting the owners of major engineering projects and their customers.

Robert A. Lincicome, Editor-in-Chief

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LETTERS

'We' and 'they'

Congratulations on your "We..." editorial (March *EL&P*, p.4). As you know, this is what I've always believed in, and now it's good to see movement in this direction.

John Turrel
Mt. Vernon, IL

Editor's note: Thanks for the good words, John. Perhaps the concession by the various organizations within the electric utility industry haven't produced earth-shattering results yet, but the moderation of positions and the cooperation that has occurred certainly are welcome steps in the right direction. As one who led the Farm Electrification Council so well for many years, nobody knows better than you how supposedly irreconcilable political differences have hindered potential industry progress in the past. Great to hear from you again.

Unisex references for slow learners

You still don't get it. Although this adjective [as in *feminine* readers] might apply to some men and women, it's still discriminatory. It must be difficult to give lip service to equality when you haven't resolved it in your own mind!

Just an observation. Keep up the good work and sense of humor.

Undecipherable signature

Editor's note: So soon old, and so late smart, to quote an old Pennsylvania Dutch saying. I think the problem goes back to the fact that when I was growing up, women considered it a compliment to be considered to be feminine. It's hard to break life-long concepts.

Family ties

There's an aspect of electric utility life—in this fast-changing era spawned of competition for generation by cogens, self-gens and independents—that I've not seen addressed as yet. Perhaps my broaching it here may lend legitimacy to it as an issue.

When one's association with a given industry is as long as some of us have been in the electric utility business it's only a matter of time until we realize—in the words of the song—that "We Are Family." It's the kind of family relationship that often strains our personal family ties on vacation... such as when a power plant silhouetted on the horizon struck fear in each of my family's hearts that dad was again going to steal precious hours from their vacation time by detouring through another power plant while they sat in the car!

"Don't you think it's going a bit too far," was the comment of my remarkably tolerant wife that made me change my ways, but the urge persists. I enjoy the spirit of comradery among us "utility types" (a curious phrase that so often has me wondering what those on the outside really mean when they characterize us so), especially when strangers turn out to be "family!"

For instance, take the time when I was doing the "parents' shuttle," the term my wife and I coined to describe the thankfully-past phase of our lives when we shuttled between college and home, alternately depositing and retrieving collegiate offspring. I was alone on this particular run to the Harrisburg, PA, area because the confines of our tiny oriental automobile dictated that there was room for only two passengers, given the amount of stuff to be lugged home with my daughter on that trip. The six-hour journey necessitated stopping for nourishment. I chose Howard Johnson's near Wilkes-Barre. The bus in the parking lot, with diesel engine gurgling, gave off more than just the foul fumes in the air. It signaled that a long wait lurked inside the twin glass doors. Undaunted, I pressed on, finding the place mobbed with a senior citizens' travel group. Seeing an open seat at the counter next to a gentleman much older than I, I pounced on it and quickly agreed with the waitress about what I'd enjoy for my supper.

The man and I exchanged pleasantries and—before either of us sensed what had happened—discovered our "utility types" bond. He was well into his retirement from Pennsylvania Power & Light Co., and extolled the virtues of his satisfying career, first, and now his retirement. My side of the conversation dealt with the goings on at Northeast Utilities (NU), my company. "Never heard of that one," he responded, and spoke of his work with "lines and meters." I filled him in on the power plants where I "turned the crank," and the high-tech plant computers with which I was involved at the time.

"I like meeting people from electric light companies, like you," he said. "It helps me stay in touch."

It was then that I remembered the pocket-sized version of NU's annual report that I carry in my wallet. He accepted it appreciatively as a souvenir of our chance encounter.

Another instance involved our children. I was completely surprised when a semblence of the electric utility bond surfaced in our children. It happened in the year of our nation's bicentennial, on a Florida vacation trip day at the beach in Sarasota, FL. At the edge of the parking lot was a line truck from the area's utility. Two figures were slumped in the front seats, their heads resting on the sills in apparent slumber.

Upset by what they interpreted as sleeping on the job, Jeff and Laura cried out for me to do something. I was in a classic no-win situation. If I acted on their plea, I risked bodily harm from a couple of burly linemen. My failure to act, however, would label me a coward, not the father my children respected, glancing at my watch, I began a delaying tactic and reasoned "... these men are on their lunch hour. Watch. When it's 12:30 I bet they'll go back to work.

As we spread our blanket on the white sand, the kid's attention was riveted to the far side of the parking lot. The clock ticked on. I whispered to my wife, "When I was their age I didn't give

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EPRI limits report availability

PALO ALTO, CA—The Electric Power Research Institute put in place new policies regarding availability of reports resulting from EPRI-sponsored research.

According to Barbara Klein, spokesperson for the institute, *member U.S. utilities* still may order research reports at no charge.

The biggest change, however, is that *non-member U.S. utilities* will not be allowed to order the reports at all.

And prices to other non-members, including foreign utilities, have been revised to more adequately reflect costs of the research projects on which the reports are based.

The new policies are a radical departure for the organization, which formerly was quite liberal in sending out reports, usually at low prices, to anyone who wanted to buy them.

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VOICE OF THE ELECTRIC UTILITY INDUSTRY

LATE NEWS

Bankruptcy court OK'd the PSNH reorganization, the NU takeover, and rate hikes of 38.5%; regulators' approvals are needed.
After "Global warming" disputes, President Bush requested studies to consider economic and human effects of any responses.
GPU and DQE Inc. agreed to build a 200-mi, 500-kV, 1.5-GW line for $480M from W. PA to NJ.
The NRC approved a full-power license for Comanche Peak Unit 1.
GM suggested it would market an electric car in the U.S.

Senate passes Clean Air bill

NEWS ANALYSIS

WASHINGTON—Many superlatives—good and bad—have described the Senate's landmark clean air bill since its 89-11 approval on April 3. With an estimated eventual cost of $21 billion *annually*, "expensive," is the one word most people agree upon. The acid rain portion alone may cost $7 billion a year.

Cost estimates range widely on the Senate bill, the House version (see story, right), and the still-anticipated compromise.

The EPA's David Ryan said the Senate bill wouldn't cost $21 billion annually until fully implemented in 2005. Over the next three years, it would cost less than $5 billion per year, and less than $11 billion annually in the late '90s, he said.

But the cumulative effects of more than 100 amendments, vague language, and eventual Environmental Protection Agency interpretation are all wild cards. As was the case with the Clean Air Act of 1977, the industry may not know the law's full cost until testing and litigating its language and limits.

As expected, industry trade groups and environmental groups said the bill could have been "better."

The debate's fury has been fed in-part by the environmental fervor surrounding Earth Day's 20th anniversary, April 22. Pent-up demand after years of clean air discussion in Congress also has contributed. Few legislators want to be tagged as anti-environmental. But legislators also have added amendments to reflect constituent views or those of special interest groups.

Political analysts' predictions vary on the timing of the House bill and a Senate/House compromise. Some say it could become law as early as July; others contend it will run down to the wire at the end of the session in October.

Apart from official White House cau-

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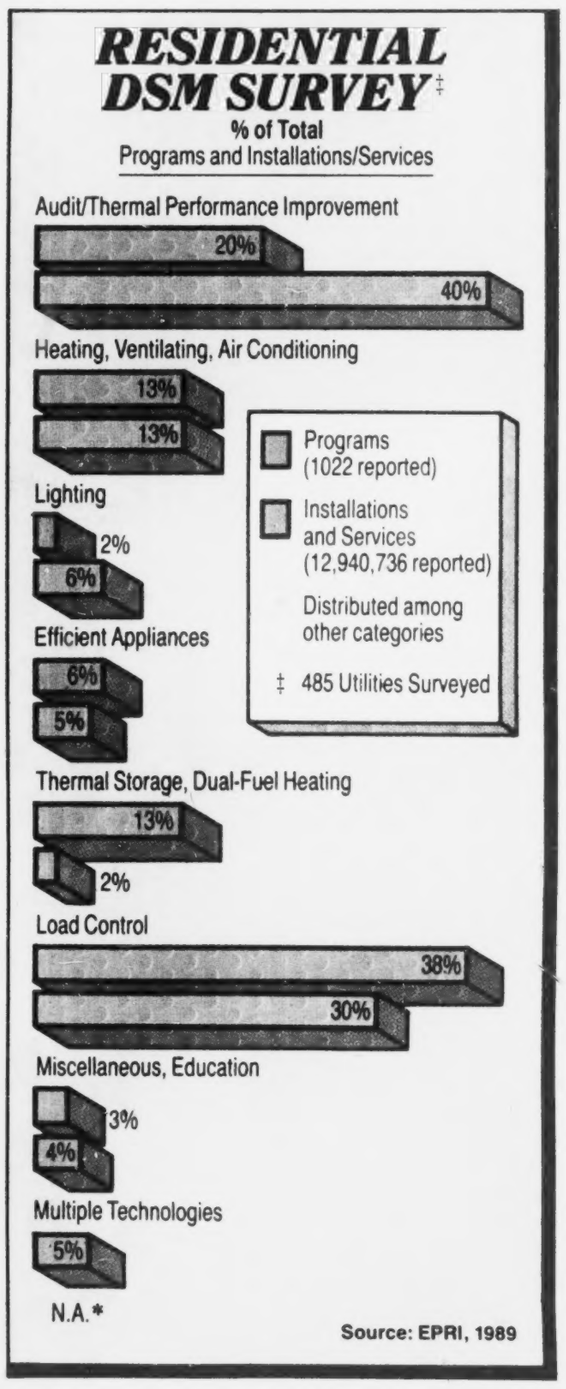


House action expected soon

WASHINGTON—The House was expected to begin debate on Clean Air as early as late April. The House Energy & Commerce Committee passed H.R. 3030 by 42-1 after a lengthy closed-door debate.

The annual cost of the House Clean Air bill eventually would be about $20 billion, including about $4 billion a year for the acid rain portion. The legislation remained fluid, according to one Environmental Protection Agency staff-

Continued on page 8

C-U files Ch. 11; rates: REA vs. PUC; merger talks on hold

MONTROSE, CO—Colorado-Ute Electric Association voluntarily filed for reorganization under Chapter 11 of Federal Bankruptcy Code, in part due to a rate reduction by the Colorado Public Utility Commission.

A reorganization plan is required 120 days after the March 30 filing.

Negotiations of the proposed merger of C-U and Tri-State Generation and Transmission Assocation have been suspended (but not terminated) as a result of the March 8 PUC tentative rate decision to cut wholesale rates to 4.2¢/KWh from 4.4¢/kWh to C-U's 14 member distribution systems.

As a result of the PUC decision and other factors, C-U said, Tri-State has withheld advances of funds under the revolving loan agreement, and C-U can no longer operate without protection from creditors.

Despite the filing, Tri-State members directed the board and management "to continue to pursue, at its own discretion and pace, within the bankruptcy proceeding...all merger and third-party transaction possibilities."

Regulators battle, for a change

C-U's position was confused by a conflicting rate order by the major C-U creditor, the Rural Electrification Administration, which ordered a rate increase to 5.2¢/kWh, with an interim

Continued on page 10

Partners dedicate Midland Cogeneration Venture

CMS challenges PSC

Mark T. Hoske
News Editor

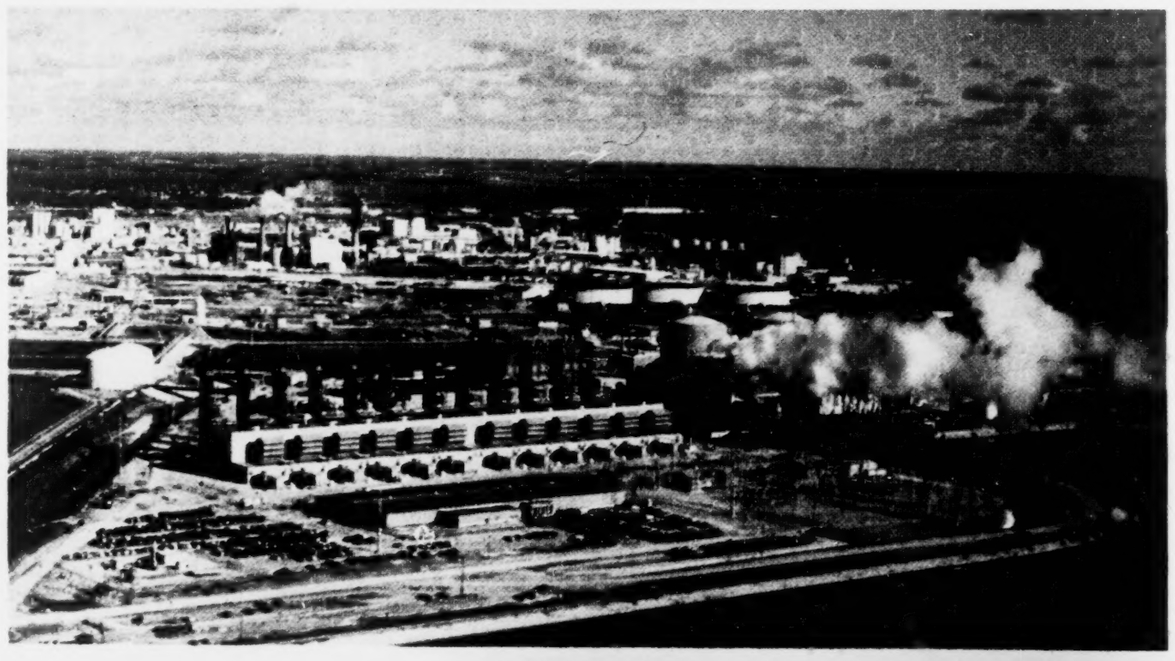
MIDLAND, MI—Hoopla surrounded the MCV Partners' dedication of the one-of-a-kind 1370-MW Midland Cogeneration Venture on April 9. About 400 people attended.

The congratulatory event didn't seem to be marred by recent state regulatory challenges of the transfer of Consumer Power Co. MCV assets to the unregulated CMS Energy subsidiary.The utility has appealed in court regulators' decisions on rates and the amount of power the utility can purchase. Consumers Power's parent, CMS Energy Corp., is 49-percent MCV owner.

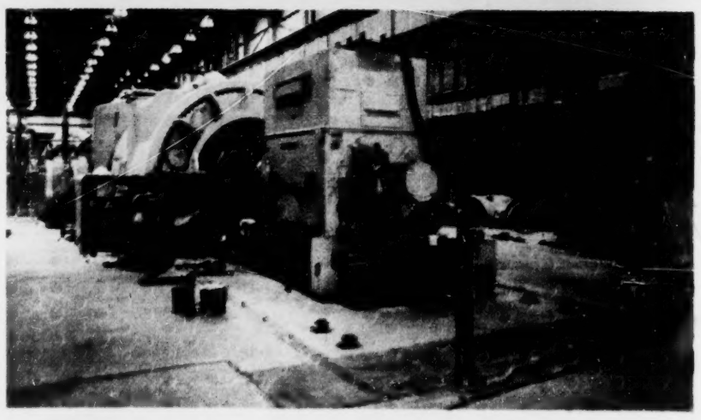
MCV went commercial in March. The 12-gas-turbine, combined-cycle plant also creates 1.35 mmlb/hr process steam. The conversion cost under $650 million; the total project, $2.5 billion. Original owner Consumers Power had spent $4.2 billion on the nuclear portion.

Federal and state offi-

Continued on page 9



MCV Partners dedicate the 1350-MW Midland Cogeneration Venture. The Michigan plant went commercial in March and is the first conversion of a cancelled nuclear plant to natural gas. The conversion cost was under $650 million; project assets total $2.5 billion. Original owner Consumers Power Co., which spent $4.2 billion on the cancelled nuclear portion, is still tangling with regulators on issues related to the transfer of assets and a financial recovery plan.



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News Briefs

JILL MINNER, Special Projects Editor

MGE, NSP sign deal

According to Madison Gas and Electric Co., it has signed a low-cost power deal with Northern States Power Co. Under the agreement, MGE will be supplied with direct access to NSP's sources of economic generation in Minnesota, North Dakota, South Dakota and Canada. NSP will also be able to buy power from MGE at certain times, according to the contract. As of early April, the agreement was still pending approval of the Federal Energy Regulatory Commission. MGE said it has similar arrangements with other Wisconsin investor-owned utilities.

DOE proposes rule to protect whistleblowers

Secretary of Energy James D. Watkins said a new rule has been proposed that would prohibit employers under contract to the Department of Energy from retaliating against individuals who report unsafe, wasteful or illegal practices to DOE. "Preventing retaliation against contractor employees for raising safety, environmental, and management concerns is critical to our efforts to assure that all DOE facilities are well-managed, efficient, and safe," stated Watkins. "We must protect these people so that they will feel free to come forward with their good-faith concerns. The proposed rulemaking would give us the means to guarantee this protection," he added. The new rule would broaden protections already available and establish comprehensive procedures to make the protections effective, according to DOE.

Penelec cuts costs with voluntary severance

In an effort to cut costs, Pennsylvania Electric Co. offered its 500 employees a voluntary severance plan. According to Penelec, a total of 42 employees accepted the plan. "Penelec has been seeking opportunities to reduce costs through restructuring its organization in a manner that reduces through attrition, the total number of non-bargaining employees. This voluntary severance plan accelerated this purpose," explained Penelec President Robert L. Wise. He added that there are no current plans for layoffs at the General Public Utilities Corp. subsidiary.

NIPSCO adopts plan to protect shareholders' interests from takeover

NIPSCO Industries Inc., parent company of Northern Indiana Public Service Co., said it has adopted a share purchase rights plan to protect its shareholders' interests in the event of a takeover. NIPSCO stated that the plan's adoption was not in response to any specific attempt to acquire control of the company. "The plan is intended to encourage any potential acquirer to negotiate fairly with the board. The plan in not intended to prevent an acquisition of the company that is in the best interests of the shareholders, or to prevent a proxy contest," explained NIPSCO Chairman and CEO Edmund A. Schroer.

UtiliCorp announces venture into the UK

UtiliCorp United Inc. said it has invested $1.7 million in Norland Pipelines Ltd., a British company specializing in oil and gas related ventures. According to UtiliCorp, Norland was formed to develop opportunities in the transportation, processing, treatment, handling and delivery of natural gas, oil and related hydrocarbon products. UtiliCorp, a 19.9-percent equity owner, will be joined by British Steels PLC and several individual investors with energy experience. UtiliCorp said this is its first venture in Europe.

Bush visits PEPCo's Chalk Point Plant

President George Bush recently visited Potomac Electric Power Co.'s Chalk Point Generating Station in Maryland. The President was accompanied on his tour by Secretary of Energy Admiral James Watkins, Environmental Protection Agency Administrator William Reilly, PEPCo President Edward F. Mitchell and Chalk Point Plant Manager Hula C. Edmonds. During the visit they stopped at the utility's Aquaculture Center where young striped bass are raised for release into a tributary of the Chesapeake Bay. "I'm very impressed with PEPCo's fish program, because raising a million 'stripers' to replenish the Chesapeake Bay is a significant environmental contribution," said Bush. "You've got a wildlife sanctuary here—that's very good citizenship," he added.

Demand for electricity to grow in '90-'91: EIA

Growth in demand for electricity is projected to average 3.2 percent in 1990 and 1991, according to the Energy Information Administration's *Short-Term Energy Outlook* report. EIA said it expects the majority of the growth to take place in the commercial sector of the economy. Petroleum demand in the United States is expected to remain virtually flat in 1990, according to the report. The expected lack of growth is due to slower economic expansion, continued improvements in automobile efficiency, and reduced oil use at electric utilities as nuclear and hydroelectric power availability improves, said EIA.

USCEA poll finds some environmentalists view nuclear as important

The results of a national poll, conducted by Cambridge Reports Inc. for the U.S. Council for Energy Awareness, revealed that a majority of environmentalists, "think nuclear energy *will* and *should* be important in meeting the nation's future electricity needs." USCEA said that 18 percent of the 1250 American adults polled in the random sample were identified as environmentalists. Sixty-nine percent believe nuclear energy will be important and 58 percent think it should be important, according to the poll. Fifty-six percent were aware that nuclear electric plants emit no greenhouse gases, compared to 45 percent of other Americans. "This polling research provides the first signs of a new 'mainstream environmentalism' that is more realistic and objective in its view of energy sources," stated USCEA President Harold B. Finger. "Other Americans believe nulcear energy is important in meeting our electricity needs, but this poll showed they are less aware of nuclear energy's environmental benefits. With increasing public concern about the environment, maybe this knowledge gap will close," he added.

Homes with teens use over 50% more energy, says Consumers Power

After conducting a new energy use trend analysis, Consumers Power Co. reported a sharp difference in overall energy consumption between households with teenagers and those without. On average, approximately 54 percent more electricity was used by households with teens, according to the utility. In addition, one out of six homes served by Consumers Power includes teenagers. "Consumers Power's challenge in serving the energy requirements of younger, higher consumption customers is twofold. We must ensure that needed electric and gas supplies will be there, and provide quality information on energy conservation measures," stated Paul A. Elbert, Consumers Power vice president of marketing, sales and wholesale power transactions.

BE uses new DSM lead gathering system

Boston Edison Co. plans to use a new lead gathering system at its commercial trade shows this year. The ITS System, created in cooperation with Breakaway Presentations Inc., will be used to focus on three of the utility's demand-side management programs: cool storage, efficient lighting, and generator assistance. The system employs an interactive touchscreen computer to gather information on prospective DSM clients. Boston Edison's computer and exhibit will travel to 10 trade shows this year, according to the company.

FERC chairman named to NARUC committee

Federal Energy Regulatory Commission Chairman Martin L. Allday was named to the Executive Committee of the National Association of Regulatory Utility Commissioners. Allday, who took over as chairman of FERC in November 1989, was previously Solicitor for the U.S. Department of the Interior. As an executive committee member, he will assist in formulating NARUC policy on issues relating to the regulation of electric, gas, transportation, telephone, water and sewer services.

WV Power head chosen

West Virginia Power, a division of UtiliCorp United Inc., has appointed George B. Kitchens president. Kitchens, previously vice president-administration for the utility, succeeds the retiring James E. Harden.

Utilities fined by NRC

The U.S. Nuclear Regulatory Commission recently proposed the following fines:

Baltimore Gas & Electric
A $100,000 fine for alleged failure to comply with NRC safety requirements for procedural problems at Units 1 and 2 of the Calvert Cliffs nuclear power plant.

Consumers Power Co.
A $75,000 fine for violations of NRC safety requirements in the design of pipe-support modifications at the Palisades nuclear power station.

Indiana-Michigan Power
A $75,000 fine for one violation of NRC safety requirements for mechanical problems at Unit 2 of the D.C. Cook nuclear plant.

Pacific Gas & Electric Co.
A $50,000 fine for alleged violations of NRC requirements involving the operability of a safety system at the Diablo Canyon nuclear power plant.

GSU nuclear plant gets top ratings from NRC

Gulf States Utilities Co. said the Nuclear Regulatory Commission has given its River Bend nuclear power plant the highest possible performance ratings in three categories: plant operations, radiological controls, and emergency preparedness. After the NRC performed its Systematic Assessment of Licensee Performance on the 940-MW plant, officials noted that, "strong management support for excellence continued to be evident."

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Nuclear industry surpasses performance goals early

ATLANTA—Several 1990 performance goals for commercial nuclear power plants, set in 1986, were surpassed in 1989, according the Institute of Nuclear Power Operations annual report.

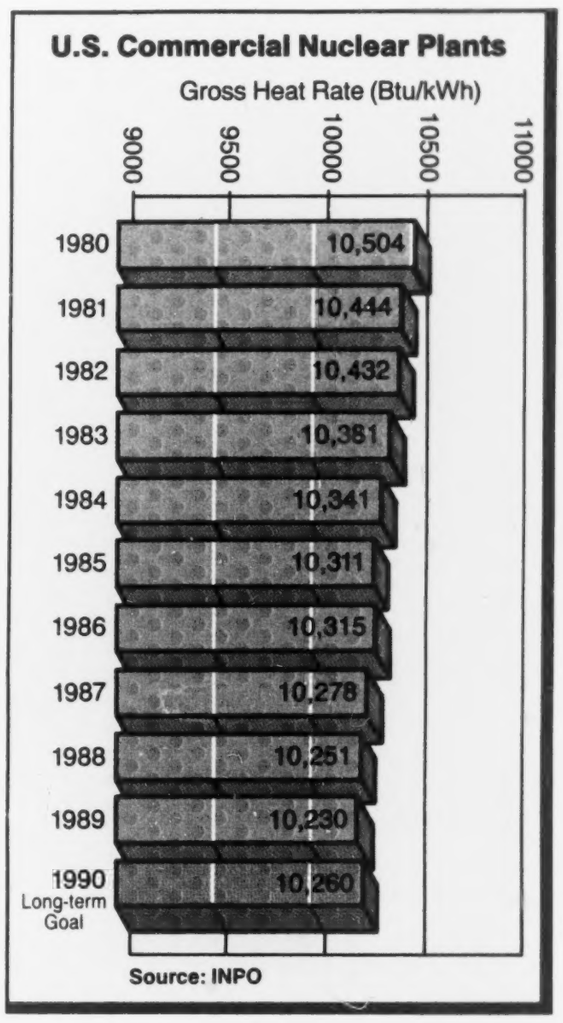
Those were:

- Boiling water reactor (BWR) collective radiation exposure in man-rem per unit: 442 in 1989, compared to the 1990 goal of 469. Exposures in 1985-88 were: 800, 622, 521, and 511. In 1980 exposure was 1230.
- Average gross heat rate per unit in Btu/kWh: 10,230, compared to the 1990 goal of 10,260. Heat rates in 1985-88 were: 10,311, 10,315, 10,278, and 10,251. In 1980 the heat rate was 10,504.
- Volume of low-level solid radioactive waste for BWR in m^3/unit: 313, compared to the 1990 goal of 466. Waste volumes in 1985-88 were: 797, 493, 459, and 312. In 1980 waste volume was 1113.
- Volume of low-level solid radioactive waste for PWR in m^3/unit: 167, compared to the 1990 goal of 213. Waste volumes in 1985-88 were: 334, 211, 194, and 169. In 1980 waste volume was 586.

Other goals attainable

Other performance indicators were within the industry's reach in 1990, said INPO's Angelina Howard. These other performance indicators were:

- Pressurized water reactor (PWR) collective radiation exposure in man-rem per unit: 292 in 1989, compared to the 1990 goal of 288. Exposures in 1985-88 were: 425, 397, 368 and 345. In 1980 exposure was 597.
- Unplanned automatic scrams (shutdowns) average per unit: 1.8, compared to the 1990 goal of 1.5. Scrams in 1985-88 were: 4.3, 3.9, 2.7, and 2.1. In 1980 scrams were 7.4.
- Unplanned safety system actuations average per unit: 0.9, compared to the 1990 goal of 0.8. Safety system actuations in 1985-88 were: 1.3, 1.2, 0.9, and 0.8.
- Industrial safety lost-time accident rate, number per 200,000 manhours worked: 0.25, compared to a 1990 goal of 0.19. The numbers 1985-88 were: 0.64, 0.40, 0.34, and 0.30. In 1980 the number was 1.36.

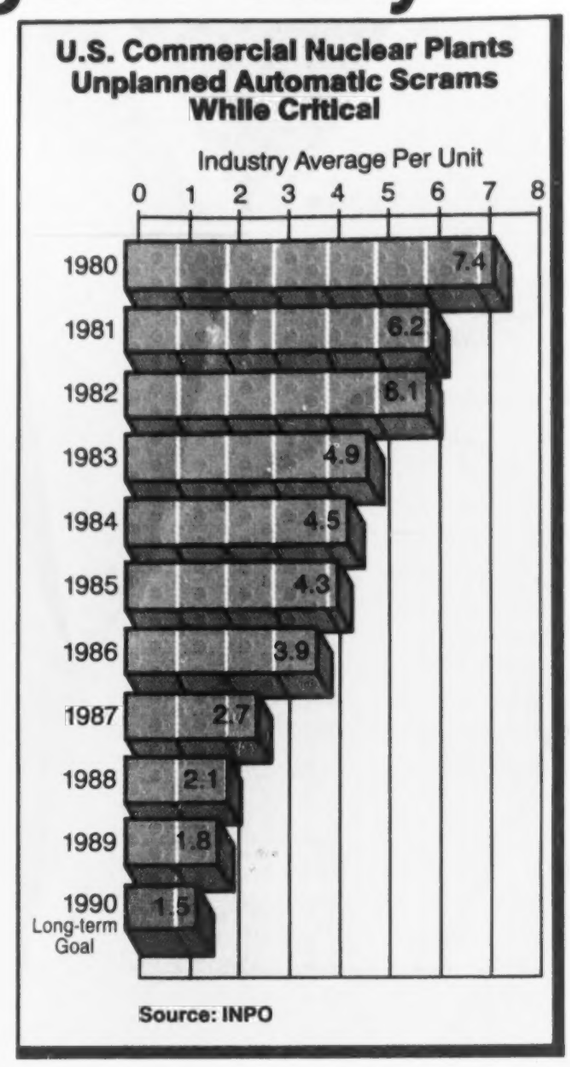


Number of exposures up in 1988

Some statistics were clearly worse, according to a recent report by a consumer advocacy group, Public Citizen. The study, citing 1988 data from the Nuclear Regulatory Commission—the most recent available—said 105,265 workers were exposed to measurable radiation.

The study said the number of workers exposed in 1986 and 1987 were 100,992 and 104,511, respectively.

A spokesperson for the U.S. Council for Energy awareness explained that those numbers also represent an increase in the total number of industry workers and more plants. Both the average number of workers exposed per plant and the amount of exposure per worker decreased from 1987 to 1988, USCEA pointed out.



NERC warns of likely supply shortage

PRINCETON, NJ—"Risks to a reliable supply of electricity have never been greater or capacity margins tighter," said William H. Clagett, chairman, North American Electric Reliability Council (NERC).

In NERC's 1989 Annual Report, Clagett pointed out that it's not the uncertain growth in demand (which may well exceed the projected 2 percent) but rather the loss of flexibility to respond to that growth. If the growth trend continues, he said, supply deficiencies in the eastern half of the U.S. and Canada are likely in the early 1990s.

Generation shortfall

Even though utilities are planning to add 92,900 MW over the next 10 years, Clagett adds, 43 percent are *not yet under construction* and based on normal construction times, some will not be completed on time.

Furthermore, over 20 percent of planned additions are non-utility generators over which utilities have no control. Plus, of the 36 percent already under construction, there is some risk of those not being completed on time.

Jack C. Wells, chairman, engineering committee, said, "Mother Nature, in several major instances this year, brought into clear focus the value of a reliable supply of electricity. Hurricane Hugo, the San Francisco earthquake, the solar magnetic disturbance in Quebec, and the sustained unusually cold December temperatures in the U.S. played havoc with electricity supplies in portions of several Regional Councils."

Hurricane Hugo left 1.25-million people out of service in North and South Carolina; caused extensive damage to the transmission system in South Carolina; and left a $180-million price tag for labor and material to restore the damaged T&D systems.

"This year, NERC introduced a multifaceted education program to help electric utilities explain system reliability to policymakers and opinion shapers," said Larry C. Kinard, chairman, operating committee.

Educating utility personnel is just as important, Kinard added. The operating committee, in conjunction with the Electric Power Research Institute, recently completed a tutorial for system operators that explains how the electric system responds to disturbances.

National Energy Strategy takes shape in report

WASHINGTON—Strong appeal for energy efficiency was the loudest single message from the Department of Energy's hearings on the National Energy Strategy over the past year, said Secretary James Watkins.

The interim NES report, 230 pages, summarizes more than 1000 written statements and 12,000 pages of hearing transcripts from 15 public meetings. Comments are due July 2.

Other major points, in addition to energy efficiency, include the need for:

- Integrated resource planning.
- Enhanced energy efficiency.
- Increased use of renewables, including hydropower.
- Streamlined technology tranfers.
- Upgraded math and science training.
- Meeting environmental challenges and waste minimization, including improved nuclear power reactors.
- Developing a national energy modeling system.

Additional workshops will be held by midsummer. Interagency staffs and working groups will review the strategy in the fall, a final NES report will go the Administration in December, and the president is to release the final document by March 1991.

National Energy Strategy: Interim Report, is available by calling 202/586-6540, or writing DOE, Office of Public Inquiries, Rm. 1E-206, Mailstop PA-5, Washington, DC 20585.

ComEd tries again, requests 17.7% rate increase, $982M

CHICAGO—Commonwealth Edison Co. keeps right on asking.

The utility asked state regulators for a $982-million, 17.7-percent rate hike April 12 to help pay for three nuclear units. The filing also would stop unpopular higher summer rates, begun in 1979. The company said it would not expect to increase rates again until 1993, if this request is granted.

Financial conditions at ComEd have suffered (see p.16); other rate-hike requests to pay for the three operating units have been denied or overturned.

"We have an obligation to our customers and shareholders to bring this matter to a conclusion," said Chairman James J. O'Connor.

"Today's filing is essentially a continuation of the proceeding that began in 1986," he said.

The Illinois Commerce Commission hadn't responded to a Dec. 21, 1989, state Supreme Court rejection of a previous rate compromise package. A clarifying court order may come in June.

Rates increased $235 million in 1989, would have increased $245 million in 1990, and would have frozen through 1994. That rate package was overturned because regulators forged the compromise without the consent of dissenting parties, the court said.

The utility and regulators are unsure if the first half of the increase must be refunded, or if rates should stay as they are until another rate plan is approved.

Consumer groups want a refund. ComEd has sought a rehearing and clarification. The court was expected to issue a clarifying order in early April, but did not (*EL&P*, Feb., p.1).

ComEd unsuccessfully sought a $660-million increase in 1986.

ComEd has 12 nuclear units, the most of any U.S. utility.

SCE/SDG&E merger hearings start in CA

SAN DIEGO—Hearings on the proposed merger of San Diego Gas & Electric Co. and Southern California Edison Co. began in late April and will continue till mid-May.

In late March, SDG&E directors reaffirmed their intention to merge with SCE. The merger agreement was extended through March 1991. The merger was proposed in 1988; shareholders approved it in April 1989.

'Evergreen' provision

Tom Page, SDG&E president, chairman and CEO, said, "Although the board didn't need to vote because of an 'evergreen' provision which simply would have allowed the agreement to continue, the board wanted to affirm its strong commitment to the merger by extending the agreement to a date which should provide ample time to complete the expected regulatory approvals."

Federal regulatory hearings are underway in Washington, DC, and state hearings run in various locations April 23 through May 16.

Merger opponents are expected to present a wide range of concerns at the hearings, including doubts about the suggested amount of merger cost savings, the loss of a San Diego-based corporation, possible anti-competitive issues in the regional power market, and the impacts on the environment.

Promised benefits

The SDG&E board said the merger would:

- Increase SDG&E shareholder value.
- Save the utilities a total of $1.7 billion through the 1990s.
- Offer San Diego-area customers the more diversified generating resources of SCE.
- Delay SDG&E construction of new generating facilities.
- Take into account interests of employees, suppliers and communities served by both utilities.
- Improve San Diego's air quality.

Correction

The correct address for Powercomp International (*EL&P*, Apr. 1990, p.23) is 3208C E. Colonial Dr., Suite 195, Orlando, FL 32803.

COMMENTARY

Notes from the back of an envelope

We WILL clean the air

It now is abundantly clear that we will have a new set of Clean Air rules and regulations this year. Clean Air legislation has become so politicized that almost everyone in Congress is rushing to get his or her favorite amendment tacked onto the proposed act. Never mind that most authorities say that government estimates of costs are vastly understated. Never mind that many scientists and engineers declare that the measures specified in the proposed legislation are neither the most efficient, nor cost effective. Never mind that Congress is so hot to act that it refuses to wait another six months until its mandated 10-year, $500-million acid rain report is completed and submitted. (This is a virtual guarantee that copies of the study will quickly be relegated to dust-gathering functions in government libraries and warehouses.) Never mind that some stipulations in the Air Toxics section could shut down major industries and throw thousands of employees out of work. This is shoot-from-the-hip-and-ask-questions-later time. With all the dozens, possibly hundreds of amendments that will be tacked on to the House Energy Committee's version of the bill, floor debate may be lengthy. Reconciliation with the Senate version also will be time consuming. But there is little question that we WILL have a Clean Air Act before the end of this session of Congress. Nobody in Congress wants to miss the environmental bandwagon!

Photovoltaic efficiencies improved

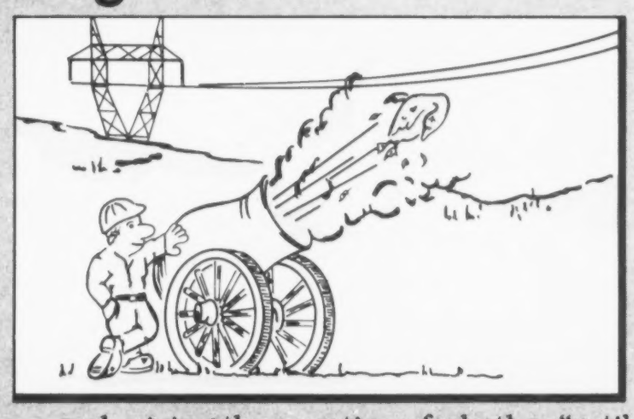
Solar power has moved a step closer to becoming a potential substitute, albeit still an expensive one, for conventional generation. Scientists at Kopin Corp. in Taunton, MA, and Boeing Aerospace and Electronics in Seattle have created a solar cell that is about twice as efficient as the most advanced cells produced previously and used in our satellites. Using ultrathin layers of gallium arsenide (GaAs) and copper indium deselenide (CIS), the scientists have developed a cell that captures and converts 26 percent of the light that hits it to photovoltaic electricity, with the potential of exceeding 30 percent. While the photovoltaic efficiency level is approaching the thermal efficiency levels of many older steam units, diesel engines and gas turbines in simple cycle use, power costs are still about double what they would have to be to be cost-competitive. But the gap is narrowing...and one day, perhaps within five years, who knows....?

Big bucks for communications CEOs

It was interesting to note the compensation levels of large utility CEOs in a special *Wall Street Journal* report recently (April 18). Guess where the big bucks went? Not to electric utility CEOs. The largest annual direct compensation went to phone company execs, led by MCI's William G. McGowan ($8.6 million-plus), followed by Bell Atlantic's Raymond W. Smith ($2.5 million-plus) and eight other $1-million-plus CEOs from Baby Bells and larger independent phone companies. There were only two electric utility CEOs above $1 million—PacifiCorp's A.M. Gleason ($1.4-million plus) and SCE's Howard Allen ($1-million plus). The remaining 11 electric utility CEOs received compensations averaging $601,000. Granted, such average salaries aren't exactly peanuts, but they're a far cry from the way those "phone-guys" get paid.

Dead birds no joking matter

The story about Pacific Gas & Electric's bird strike monitor and development of a "bird cannon" to test its accuracy ("How many birds fly into your T-lines?" on p.35) may touch on the bizarre, but at PG&E, it's deadly serious work on which future transmission system expansion hinges. Nevertheless, our cartoonist couldn't contain himself, turning out the above and raising the question of whether "artilleryman" is a new utility job title? *Robert A. Lincicome, Editor-in-Chief*



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Iowa holding company merger expected by the end of the year

DES MOINES, IA—Two Iowa utility holding companies expect to complete their proposed merger in less than 10 months to form a new holding company, Midwest Resources Inc. Appropriate regulatory filings have begun.

Annual meetings originally scheduled in April were cancelled and were to be rescheduled for June or July to allow a shareholder vote.

Iowa Resources Inc. (Iowa Power & Light Co.) and Midwest Energy Co. (Iowa Public Service Co.) revealed merger plans on March 16 (*EL&P*, April, p. 1). The agreed penalty for one of them calling off the merger plan is a $25-million payment to the other.

Merger of equals

"We have worked very hard to find the equitable way to accomplish this as a 'merger of equals,'" said Russel E. Christiansen, MWE chairman.

"Customers and shareholders will benefit from the efficiencies that can be created from the most cost-effective use of companies' facilities. The size of the new company will create more dynamic career paths for the employees of both companies," Christiansen added.

Sallie Leibhert, manager of financial operations for IR, said the reaction has generally been positive.

While the proposed transaction is expected to cost shareholders $2.6 million, Leibhert said, savings estimates have not been revealed. The operating utilities may be merged eventually, but no plans were announced. Also, no rate cuts were anticipated, although rate increases could be delayed because of combined use of generating resources, she added.

Some transaction details

MWE stockholders would receive 1.08 shares of the new company. IR stockholders would get 1.235 shares.

The new holding company board would have nine people from each utility and one jointly appointed member.

Mark W. Putney, now IR chairman, president and CEO, would become chairman and CEO of the new company. Christiansen would become vice chairman, president and COO. Additional structure changes within the utilities have not been announced.

State regulators have previously suggested that a merger of utilities would be looked on favorably. There were talks of a merger in 1985 when IR sold its gas resources to MWE.

MWE utility assets are $934 million; total assets are $1103 million; employees number 1881. IR utility assets are $1087 million, with total assets of $1204 million; employees number 1269. Additional company information is on page 16.

NU works out PSNH agreements

HARTFORD, CT—Northeast Utilities has worked out agreements on transmission and Seabrook operations with neighbor United Illuminating Co. in hopes of smoothing out the Public Service Co. of New Hampshire acquisition.

A transmission agreement was also reached with New England Power Co.(NEP), a power generating subsidiary of New England Electric System.

More than 60 intervenors have filed with the Federal Energy Regulatory Commission about the proposed acquisition. Transmission access and regional market power are two concerns area utilities have. PSNH shareholders approved the plan (*EL&P*, April, p. 1).

Ongoing business on NU's $2.3-billion acquisition and PSNH's January 1988 bankruptcy filing include the following:

- Final PSNH bankruptcy court hearings were to finish by mid-April and the decision was expected in late April.
- New Hampshire state regulatory hearings began April 9 and run through May 4.
- Connecticut expected to have a management audit on the acquisition plan in late April.
- FERC hearings are expected in July and August, with a non-binding administrative law judge ruling by year's end. A final FERC decision may take until next spring.
- FERC and the Securities and Exchange Commission approved an interim NU management plan, which the bankruptcy judge was expected to approve in April.

The transmission agreements say:

- NU provides UI with three specific arrangements for transmission access across the NU system.
- UI agrees to withdraw several regulatory proceedings now pending on the proposed acquisition.
- UI agrees to recommend approval of the PSNH acquisition to the Connecticut Department of Utility Control.

NU's Connecticut Light & Power Co. surrounds UI service territory.

Under the Seabrook agreement, UI—also a Seabrook owner—has agreed to support NU as operator of the nuclear power plant. After PSNH acquisition, NU would own nearly 40 percent of the now-operating plant.

William B. Ellis, NU chairman and CEO, said "When combined with the recent progress we have made in bankruptcy court, our settlement with New England Electric and federal approvals of our interim management agreement, we have to be pleased that our proposal continues to move ahead."

Some of the provisions of the joint NEP-NU proposal before FERC are that:

- NU would provide firm transmission service for others across existing lines in New Hampshire; 400 MW for southern New England utilities, 40 MW for Vermont utilities, and 12 MW for small New Hampshire utilities.
- Capacity would be available at least 10 years and for up to 30 years if users agree to help support construction of new facilities if needed.
- NU and NEP would agree to initiate building more transmission capacity between Maine and Massachusetts, if users financially support construction and regulatory approvals are granted.

NU would continue to provide transmission service to other utilities as capacity is available.

NJ board denies opponents request

NEWARK, NJ—The Board of Public Utilities denied requests from Berkeley Township and Ocean County, NJ, to prevent Jersey Central Power & Light Co. from energizing a new 230-kV line.

Board president Scott A. Weiner stated that opponents to the line had not shown it would have harmful effect on nearby residents including those with pacemakers.

Weiner said the board would open a proceeding to consider setting a general policy on the extent to which health risks must be shown to warrant the relocation or shutdown of existing power lines or other utility facilities.